U.S. DEPARTMENT OF TRANSPORTATION Federal Highway Administration Utah Division Office

RECORD OF DECISION

Syracuse Road, 1000 West to 2000 West Syracuse, Davis County, Utah

Project No. STP-0108(8)4

February 2007

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1.0 DECISION

This document is the Federal Highway Administration's (FHWA) Record of Decision (ROD) regarding the proposed Syracuse Road project. This ROD approves the selection of the Preferred Alternative identified in the Final Environmental Impact Statement (Final EIS) dated June 2006. The FHWA hereby approves the selection of the Preferred Alternative (Alternative C – Widen to the South (No.2)) as identified in the Final EIS for the roadway improvements to Syracuse Road between 1000 West and 2000 West in Syracuse, Utah. (Syracuse Road is also known as 1700 South, Antelope Drive, and SR-108.) This approval constitutes FHWA's acceptance of the Preferred Alternative, henceforth referred to as the Selected Alternative, for Syracuse Road improvements between 1000 West and 2000 West and completes the approval process for the environmental evaluation.

This Record of Decision presents the basis for a decision to implement a transportation project consisting of a two travel lanes in each direction with a center turn lane, shoulders which include a bike lane, curb and gutter, and sidewalk. This decision is based on an evaluation of information presented in the Final EIS, including the transportation needs of the project study area. The proposed action will accommodate east-west travel demand with a transportation facility that is consistent with current design standards and state, regional, and local plans, and that will enhance multi-modal facilities. FHWA has carefully reviewed all concerns in the course of approving the Selected Alternative and has concluded that this alternative reasonably maximizes the transportation benefit, minimizes environmental impacts, and effectively meets the project's purpose and need.

The Selected Alternative:

- Meets the project objectives by providing a facility designed to current design standards with capacity to meet the east-west travel demand through 2030. The facility is consistent with the Utah Department of Transportation (UDOT), Wasatch Front Regional Council, and Syracuse City transportation plans. It is also consistent with the Syracuse City General Plan and Town Center Master Plan. Multi-modal facilities are enhanced for pedestrian, bicycle, and bus use.
- Causes the least impacts to the environment.

State and federal agencies have concurred with the likely environmental consequences and that all practical measures to minimize harm are incorporated.

- The United States Army Corps of Engineers has determined (on October 14, 2003) that there are no jurisdictional waters, including wetlands, of the U.S. affected by this project.
- The Utah Department of Natural Resources, Utah Geological Survey, has determined (on March 15, 2004) that there were no paleontological resources in the project area.
- The State Historical Preservation Office has concurred (on December 20, 2004) with the Determination of Eligibility and Finding of Effect as to historic properties.
- The United States Fish and Wildlife Service has concurred (on February 9, 2005) with the determination of "no effect" on threatened and endangered species and critical habitat.

This Record of Decision is issued under the requirements of Chapter 40 of the Code of Federal Regulations (CFR) 1502.2 and Chapter 23 CFR 771.127. The information in this Record of Decision is based on information presented in the Syracuse Road Final EIS prepared by FHWA and by the Utah Department of Transportation (UDOT) and released for public review during September and October 2006. The Final EIS and the entire project record are available for review upon request to the FHWA Utah Division.

2.0 ALTERNATIVES CONSIDERED (Page 2-1 of the Final EIS)

The following alternatives were considered, including all "reasonable alternatives" under consideration and those "other alternatives" which were eliminated from detailed study:

- No-action Alternative
- TSM Alternative
- Transit Alternative
- Three-lane Alternative
- Five-lane Alternatives
 - o 110- foot Right-of-way Width
 - Alternative A Widen equally about centerline
 - Alternative B Widen to the south (No. 1)
 - Alternative C Widen to the south (No. 2)
 - Alternative D Widen to the north
 - Alternative E Curved alignment to the south
 - Alternative F Curved alignment to the south and north
 - o 90-foot Right-of-way Width
 - Alternative G Widen equally about centerline
 - Alternative H Widen to the south
 - Alternative I Widen to the north
- Seven-lane Alternative
- Improve Adjacent Parallel Roads

2.1 Alternatives Considered but Eliminated (Page 2-2 of the Final EIS)

Reasonable alternatives must meet the purpose and need, be technically feasible, and be economically possible. The following alternatives did not meet these criteria and were eliminated from further study:

TSM and Transit Alternatives (Page 2-3 of the Final EIS)

These alternatives include activities to improve traffic flow; such as intersection improvements, access management, ridesharing and staggered work hours, and improved transit. They would not meet the purpose and need of the project as stand-alone alternatives because they would not provide sufficient traffic capacity to meet year 2030 travel demand. However, these alternatives were incorporated into all other alternatives.

Three-lane Alternative (Page 2-3 of the Final EIS)

This alternative includes improvements along the project corridor to create a consistent three-lane cross-section (one travel lane in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks. This alternative would not provide sufficient traffic capacity to meet year 2030 travel demand.

Alternative A (Page 2-16 of the Final EIS)

This alternative includes improvements along the corridor to create a consistent five-lane cross section (two travel lanes in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks within a 110-ft right-of-way. It would widen Syracuse Road equally about the centerline. This alternative would meet the purpose and need of the project but was eliminated due to the high number of potential relocations and impacts to historic Section 4(f) resources. It would require 38 residential/commercial potential relocations, the second highest number of potential relocations. This alternative would place the roadway right-of-way very close to 26 remaining residences/businesses. It also would impact the highest number of historic Section 4(f) resources (requiring the removal of 17 structures and taking right-of-way from another 16 properties).

Alternative B (Page 2-16 of the Final EIS)

This alternative includes improvements along the corridor to create a consistent five-lane cross section (two travel lanes in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks within a 110-ft right-of-way. This alternative widens the road to the south through most of its length and is very similar to the Selected Alternative, differing only in the location of the north to south alignment transition on the west end of the corridor. Syracuse Road is widened 32 feet to the north from the intersection of 2000 West to just west of Banbury Drive (approximately 1400 feet) to avoid impacts to Centennial Park, historic properties, and the Syracuse Museum and Cultural Center. The alignment then transitions to a full widening to the south. Then, approximately 350 feet west of 1000 west, the road transitions back to the north to match the existing Syracuse Road alignment at the 1000 West intersection. This alternative was eliminated because it would result in greater environmental impacts. It would result in an additional potential relocation and would have three more "adverse effect" Section 106 determinations compared to the Selected Alternative.

Alternative E (Page 2-16 of the Final EIS)

This alternative includes improvements to create a consistent five-lane cross section (two travel lanes in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks within a 110-ft right-of-way. This alternative would widen Syracuse Road 32 feet to the north from the intersection of 2000 West for approximately 800 feet to avoid impacts to Centennial Park, historic properties, and the Syracuse Museum and Cultural Center. The alignment then transitions to the south on a new roadway, passing behind the houses that front on Syracuse Road, and then transitions back to the north to match the existing Syracuse Road alignment at the 1000 West intersection.

Alternative E was removed from further study because it would not meet the "consistent with local plans" element of the purpose and need (for complete discussion, see September 21, 2005 Alternative E Prudence Memo in Chapter 8 in the Final EIS). The Syracuse General Plan provides for major commercial development adjacent to an improved Syracuse Road. Alternative E would interfere with the major commercial development by dividing up the available undeveloped land south of the existing alignment. This land, which has been reserved by Syracuse City for major commercial development, would be limited in the nature and size of potential development. There are no other similar properties within Syracuse suitable for commercial development, including traffic access and exposure. This is a prime commercial area of the utmost importance to the future of Syracuse City.

Alternative F (Page 2-17 of the Final EIS)

This alternative includes improvements to create a consistent five-lane cross section (two travel lanes in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks within a 110-ft right-of-way. This alternative would widen Syracuse Road 32 feet to the north at the 2000 West intersection. The alignment then turns northeast to approximately 400 feet north of Syracuse Road before turning southeast, crossing Syracuse Road (approximately 1800 feet west of 2000 West) to proceed easterly behind the houses that front on Syracuse Road. The alignment then transition back to the north to match the existing Syracuse Road alignment at the 1000 West intersection.

Alternative F was removed from further study because it would not meet the "consistent with local plans" element of the purpose and need. Alternative F would have similar impacts as Alternative E. In addition, Alternative F is the only alternative that would impact Founders Park (1500 South 1900 West). Alternative F would take over one acre of property from the park, including 0.17 acres of the parking lot (19 parking stalls), all of the 0.12 acre playground area, 0.35 acres of additional grassy area surrounding the playground, and 0.56 acres of the playing field. Section 4(f) impacts to Founders Park would not be prudent since other feasible and prudent alternatives exist that do not impact the park.

Alternatives G, H, and I (Page 2-18 of the Final EIS)

These alternatives have alignments similar to Alternatives A, C, and D. They would create a consistent five-lane cross section (two travel lanes in each direction and a two-way left-turn lane) with shoulders, curb and gutter, and sidewalks within a 90-ft right-of-way. They were eliminated from further study because they would not meet the purpose and need (did not meet

year 2030 travel demand, were not consistent with current standards, were not consistent with state and regional plans, and were not consistent with Syracuse City's plans).

Seven-lane Alternative (Page 2-4 of the Final EIS)

This alternative includes improvements along the project corridor to create a consistent sevenlane cross-section (three travel lane in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks. This alternative was eliminated because its capacity would far exceed the projected 2030 travel demand and it would have additional, unnecessary, property impacts associated with the wider roadway cross-section width.

Improve Adjacent Parallel Roads (Page 2-4 of the Final EIS)

Under this alternative, Syracuse Road would remain a two-lane roadway. Corridors to the north and south [West Point Road (300 North) and Gordon Avenue (2700 South)] would be widened to five-lane roadways. This alternative would not meet the purpose and need to provide sufficient traffic capacity to meet year 2030 travel demand.

2.2 Alternatives Selected for Detailed Study (Page 2-18 of the Final EIS)

No-action Alternative

The No-action Alternative includes short-term minor restoration activities that maintain continued operation of the existing roadway facility. The basic characteristic is one travel lane in each direction on Syracuse Road. Improvements would include pavement restoration and minor widening for shoulders, curb and gutter, and sidewalks. Improvements to other roadways within the general project area, as included in Wasatch Front Regional Council's Long Range Plan, would be included in this alternative.

Build Alternatives

Alternative C and Alternative D were selected for detailed study. Between 1000 West and 2000 West, these alternatives widen Syracuse Road to a five-lane cross-section with shoulders, curb and gutter, parkstrip, and sidewalk within a 110-ft right-of-way. These alternatives meet the project purpose and need, which includes accommodating year 2030 travel demand and complying with state, regional, and local plans.

The common design elements of these alternatives are:

- Two 12-foot travel lanes in each direction
- One 14-foot center turn lane
- Shoulder width of 12-feet
- One 5-foot Class II bicycle lane included in each shoulder
- Curb and gutter, parkstrip, and sidewalk
- Widening at 1000 West and 2000 West intersections to provide turning lanes
- Raised medians at signalized intersections to protect left-turn movements

Alternatives C - Widen to the South No. 2 (see Final EIS Figures 2-12 and 2-13)

This is the environmentally preferred alternative because it results in the least impacts of the alternatives that meet the purpose and need for the project. Alternative C widens Syracuse Road from 2000 West to 1000 West to a five-lane cross-section with shoulders, curb and gutter,

parkstrip, and sidewalk within a 110-ft right-of-way. This alternative widens the road to the south through most of its length. However, it widens 32 feet to the north from the intersection of 2000 West to just west of Heritage Lane (approximately 800 feet) to avoid impacts to Centennial Park, historic properties, and the Syracuse Museum and Cultural Center. The alignment then transitions to a full widening to the south by Banbury Drive. Then, approximately 350 feet west of 1000 West, the road transitions back to the north to match the existing Syracuse Road alignment at the 1000 West intersection.

Alternative D - Widen to the North (see Final EIS Figure 2-14 and 2-15)

Alternative D widens Syracuse Road to the north from 2000 West to 1000 West to a five-lane cross-section with shoulders, curb and gutter, parkstrip, and sidewalk within a 110-ft right-of-way. This alternative widens the road to the north through most of its length. At about 300 to 400 feet west of 1000 West, the alignment transitions back to the south to match the existing 1000 West intersection.

Both build alternatives result in similar environmental impacts, except for the differences shown in the following table:

Impact Type	Alternative C	Alternative D
Land use (Page 4-1 in the Final EIS)	Property Acquisition 3.0-ac residential 1.3-ac commercial 2.8- ac agricultural	Property Acquisition 5.5-ac residential 1.5-ac commercial 0.3-ac agricultural
Relocations (Page 4-8 in the Final EIS)	25 Potential Relocations 23 residences 1 residence/business 1 business	44 Potential Relocations 41 residences 1 residence/business 2 businesses
Noise (after relocations and before mitigation) (Page 4-19 in the Final EIS)	Noise Impacts 48 residences 1 museum 3 businesses	Noise Impacts 44 residences 1 museum 1 business
Cultural Resources (Page 4-43 in the Final EIS)	Historic structures directly affected No Adverse Effect: 4 Adverse Effect: 10	Historic structures directly affected No Adverse Effect: 2 Adverse Effect: 19

3.0 SECTION 4(F) (Page 5-1 of the Final EIS)

Section 4(f) of the Department of Transportation Act of 1966 (as amended and codified in 49 USC §303) prohibits the Secretary of Transportation from approving any program or project that "...requires the use of publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance...or any land from an historic site of national, state or local significance...unless there is no feasible or prudent alternative to the use

of such land, and such program includes all possible planning to minimize harm to such [land]...from such use" (Department of Transportation Act of 1983, 49 USC §303)

As part of the NEPA process, FHWA has evaluated the Syracuse Road corridor for Section 4(f) impacts. The Selected Alternative will have an "adverse effect" on ten historic sites and a "no adverse effect" on four historic sites. Section 3.1 of the Final EIS includes a description of the impacts resulting from the Selected Alternative, potential avoidance alternatives, and measures to minimize harm to the historic sites.

3.1 Avoidance Alternatives (Page 5-67 of the Final EIS)

As described in Chapter 5 of the FEIS, no reasonable alternative avoids all historic properties. There are 33 historic properties adjacent to the project corridor (19 historic properties on the north side, 12 historic properties on the south side, and one historic property each on 1000 West and 2000 West).

The Selected Alternative will have an Adverse Effect on the following ten historic properties:

1862 West 1700 South - Built 1948 - World War II Era Cottage

The Selected Alternative widens the roadway north in this area, requiring approximately an 82-ft by 65-ft area equaling 5,286 ft² (0.12-ac), or about 25% of the total north-side historic property and will require the removal of the historic structure.

The Selected Alternative includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1947 West 1700 South (Syracuse Express), 1875 West 1700 South (Syracuse Museum and Cultural Center), 1867 West 1700 South ("A" Insurance Agencies, historic structure – Section 4(f) resource), 1851 West 1700 South (historic structure – Section 4(f) resource), and 1747 West 1700 South (Heritage Lane Commercial Plaza) south of Syracuse Road. Therefore, to avoid impacts to 1862 West 1700 South, two Section 4(f) resources would need to be removed. For these reasons, minor alignment shifts are considered not prudent at this location.

<u>1848 West 1700 South – Bountiful Lumber Building - Built 1900 – Vernacular Style – Locally Important</u>

The Selected Alternative begins transitioning from a north shift to a south shift in this area to avoid north-side properties. The Selected Alternative will require approximately a 225-ft long area, ranging from 36-ft wide to 65-ft wide equaling 12,063 ft² (0.28-ac) from the front yard of this north-side historic property, or about 20% of the total historic property. The two residences on the property will be removed, but the historic structure (Bountiful Lumber Building) will not require removal as a result of the proposed project. However, it is unlikely that future property owners would retain the historic structure.

The Selected Alternative includes widening to the north and south at this location. A south alignment shift of approximately 36 to 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1875 West 1700 South (Syracuse Museum and Cultural Center), 1867 West 1700 South ("A"

Insurance Agencies, historic structure — Section 4(f) resource), 1851 West 1700 South (historic structure — Section 4(f) resource), and 1747 West 1700 South (Heritage Lane Commercial Plaza) south of Syracuse Road. To avoid impacting 1848 West 1700 South, two Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

<u>1797 West 1700 South – Kelly Flansen Financial Planning & Quilt School - Built 1913 – Locally Important</u>

The Selected Alternative includes an alignment transition (from north shift to south shift) in this area. The Selected Alternative will widen the roadway north and south in this area and will require approximately a 116-ft long area ranging from 35-ft wide to 55-ft wide equaling 5,308 ft² (0.12-ac), or about 24% of this south-side historic property. The historic structure will be removed.

The Selected Alternative includes widening to both the north and south at this location. A north alignment shift of approximately 35 to 55 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1792 West 1700 South (historic structure – Section 4(f) resource), 1782 West 1700 South (Children's Tea Parties, historic structure – Section 4(f) resource and property of local importance), and 1752 West 1700 South (historic structure – Section 4(f) resource) north of Syracuse Road. To avoid impacting 1797 West 1700 South, three Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1729 West 1700 South - Built 1958 - Early Ranch Style

The Selected Alternative will widen the roadway south in this area, requiring approximately an 82-ft by 65-ft area equaling 5,279 ft² (0.12-ac), or about 13% of the total south-side historic property. The historic structure will be removed.

The Selected Alternative includes widening to the south at this location. A north alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1792 West 1700 South (historic structure – Section 4(f) resource), 1782 West 1700 South (Children's Tea Parties, historic structure – Section 4(f) resource and property of local importance), 1752 West 1700 South (historic structure – Section 4(f) resource), 1724 West 1700 South, 1708 West 1700 South (historic structure – Section 4(f) resource), 1698 West 1700 South (historic structure – Section 4(f) resource), and 1674 West 1700 South (historic structure – Section 4(f) resource) north of Syracuse Road. To avoid impacting 1729 West 1700 South, seven Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1711 West 1700 South - Built 1937 - World War II Era Cottage

The Selected Alternative will widen the roadway south in this area, requiring approximately an 82-ft by 65-ft area, equaling 5,256 ft² (0.12-ac), or about 28% of the total south-side historic property. The historic structure will be removed.

The Selected Alternative includes widening to the south at this location. A north alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1792 West 1700 South (historic structure – Section 4(f) resource), 1782 West 1700 South (Children's Tea Parties, historic structure – Section 4(f) resource and property of local importance), 1752 West 1700 South (historic structure – Section 4(f) resource), 1724 West 1700 South, 1708 West 1700 South (historic structure – Section 4(f) resource), 1698 West 1700 South (historic structure – Section 4(f) resource), and 1674 West 1700 South (historic structure – Section 4(f) resource) north of Syracuse Road. To avoid impacting 1711 West 1700 South, seven Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1661 West 1700 South - Built 1956 - Ranch Style

The Selected Alternative will widen the roadway south in this area, requiring approximately an 89-ft by 63-ft area equaling 5,638 ft² (0.13-ac), or about 24% of the total south-side historic property. The historic structure will be removed.

The Selected Alternative includes widening to the south at this location. A north alignment shift of approximately 63 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1708 West 1700 South (historic structure – Section 4(f) resource), 1698 West 1700 South (historic structure – Section 4(f) resource), and 1674 West 1700 South (historic structure – Section 4(f) resource), and 1674 West 1700 South (historic structure – Section 4(f) resource) north of Syracuse Road. To avoid impacting 1661 West 1700 South, four Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1609 West 1700 South - Built 1954 - Early Ranch Style

The Selected Alternative will widen the roadway south in this area, requiring approximately an 80-ft by 65-ft area, equaling 5,120 ft² (0.12-ac), or about 32% of the total south-side historic property. The historic structure will be removed.

The Selected Alternative includes widening to the south at this location. A north alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1578 West 1700 South (Paul's Auto Repair, Thurgood Plumbing, historic structure – Section 4(f) resource) and 1558 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1609 West 1700 South, two Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1557 West 1700 South - Built 1947 - World War II Era Cottage

The Selected Alternative will widen the roadway south in this area, requiring approximately a 66-ft by 67-ft area equaling 4,334 ft² (0.099-ac), or about 44% of the total south-side historic property. The historic structure will be removed.

The Selected Alternative includes widening to the south at this location. A north alignment shift of approximately 67 feet would be needed to completely avoid impacting this historic

property. This would require the removal of the structures at 1578 West 1700 South (Paul's Auto Repair, Thurgood Plumbing, historic structure – Section 4(f) resource), 1558 West 1700 South (historic structure – Section 4(f) resource), 1546 West 1700 South, 1532 West 1700 South (historic structure – Section 4(f) resource), 1518 West 1700 South (historic structure – Section 4(f) resource and property of local importance), and 1506 West 1700 South north of Syracuse Road. To avoid impacting 1557 West 1700 South, four Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1533 West 1700 South - Built 1958 - Early Ranch Style

The Selected Alternative will widen the roadway south in this area, requiring approximately a 115-ft by 55-ft area equaling 6,353 ft² (0.15-ac), or about 29% of the total south-side historic property. The historic structure will be removed.

The Selected Alternative includes widening to the south at this location, the addition of a right-turn lane for east to south traffic movement, and widening of Allison Way to accommodate a left-turn lane for north to west traffic movement (a Syracuse Road north alignment shift of approximately 69 feet). This would require the removal of the structures at 1578 West 1700 South (Paul's Auto Repair, Thurgood Plumbing, historic structure – Section 4(f) resource), 1558 West 1700 South (historic structure – Section 4(f) resource), 1546 West 1700 South, 1532 West 1700 South (historic structure – Section 4(f) resource), 1518 West 1700 South, and 1492 West 1700 South north of Syracuse Road. To avoid impacting 1533 West 1700 South, four Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1379 West 1700 South - Built 1957 - Ranch Style

The Selected Alternative will widen the roadway south in this area, requiring approximately a 102-ft by 64-ft area, equaling 6,525 ft² (0.15-ac), or about 53% of the total south-side historic property. The historic structure will be removed.

The Selected Alternative includes widening to the south at this location. The alignment at this location would have to be moved north about 64 feet to avoid impacting this property. This would require the removal of the structures at 1384 West 1700 South (historic structure – Section 4(f) resource), 1358 West 1700 South, and 1342 West 1700 South north of Syracuse Road. To avoid impacting 1379 West 1700 South, one Section 4(f) resource would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

The Selected Alternative will have a *No Adverse Effect* on the following four historic properties:

1792 West 1700 South - Built 1946 - 20th Century Vernacular

The Selected Alternative includes an alignment transition in this area. The Selected Alternative will widen the roadway north and south in this area. The Selected Alternative will require approximately a 134-ft long area ranging from 10-ft to 33-ft, equaling 2,821 ft² (0.065-ac) from the front yard of this north-side historic property, or about 7% of the total

historic property. The historic house and any contributing features will not be impacted by the proposed project, and access will be maintained.

The Selected Alternative includes a transitional phase in this area where the road shifts south to avoid Section 4(f) resources on the north side of Syracuse Road, thereby causing impacts to this historic property. To avoid impacting this historic property, the entire curve would need to shift west about 225 feet. This shift would require the removal of the structures at 1867 West 1700 South ("A" Insurance Agencies, historic structure – Section 4(f) resource), 1851 West 1700 South (historic structure – Section 4(f) resource), and 1747 West 1700 South (Heritage Lane Commercial Plaza). To avoid impacting 1792 West 1700 South, two Section 4(f) resources would need to be removed. For these reasons, minor alignment shifts are considered not prudent at this location.

1782 West 1700 South - Built 1909 - Victorian Eclectic Crosswing - Locally Important

The Selected Alternative will widen the roadway mostly south in this area, requiring approximately a 90-ft long area ranging from 1-ft wide to 10-ft wide, equaling 422 ft² (0.0097-ac) from the front yard of this north-side historic property, or about 3% of the total historic property. The historic house and any contributing features will not be impacted by the proposed project and access will be maintained.

The Selected Alternative includes a transitional phase in this area where the road shifts south to avoid Section 4(f) resources on the north side of Syracuse Road, thereby causing impacts to this historic property. To avoid impacting this historic property, the entire curve would need to shift west about 90 feet. This shift would impact the property at 1867 West 1700 South ("A" Insurance Agencies, historic structure – Section 4(f) resource) and cause greater impacts to the property at 1851 West 1700 South (historic structure – Section 4(f) resource). The structure at 1747 West 1700 South (Heritage Lane Commercial Plaza) would need to be removed. For these reasons, minor alignment shifts are considered not prudent at this location.

1048 West 1700 South - Built 1921 - Bungalow - Locally Important

The Selected Alternative will widen the roadway mostly south in this area, requiring approximately a 111-ft long area ranging from 10-ft wide to 23-ft wide, equaling 1,824 ft² (0.041-ac) from the front yard of this north-side historic property, or about 7% of the total historic property. The historic house and any contributing features will not be impacted by the proposed project and access will be maintained.

The Selected Alternative includes a transitional phase (from south widening to centerline widening) in this area to meet the intersection at 1000 West, thereby causing impacts to this historic property. A south alignment shift of approximately 23 feet would be needed to completely avoid impacting the historic property. This shift would make it impossible for Syracuse Road to meet the existing 1000 West Intersection. For this reason, minor alignment shifts are considered not prudent at this location.

1654 South 1000 West - Built 1930 - 20th Century Other

The Selected Alternative will widen 1000 West westward in this area, requiring approximately an 81-ft long area ranging from 2-ft wide to 5-ft wide, equaling 255 ft² (0.006-ac) from the front yard of this west-side historic property, or about 2% of the total historic property. The historic house and any contributing features will not be impacted by the proposed project and access will be maintained.

The Selected Alternative includes widening 1000 West westward at this location to accommodate a right-turn lane, two left-turn lanes, and one travel lane at the intersection of Syracuse Road and 1000 West. An east alignment shift of approximately 5 feet would be needed to completely avoid impacts to this property. This east shift would make it impossible for 1000 West to meet the existing intersection. For this reason, minor alignment shifts are considered not prudent at this location.

3.2 Measures to Minimize Harm to Section 4(f) properties (Page 5-78 of the Final FIS)

Minimization efforts for Section 4(f) properties were considered throughout the project development and the analysis of avoidance alternatives. Design and construction measures to minimize impacts were evaluated as part of the detailed study for Alternatives C and D. The following design and construction measures were considered.

Reduced Right-of-Way

A reduced right-of-way (90-ft) was considered for the historic structures impacted by the proposed action. However, a 90-ft cross-section would not substantially reduce impacts to Section 4(f) resources and does not meet the project purpose and need. Therefore a reduced right-of-way was eliminated from consideration as a minimization alternative.

The Selected Alternative, in its original form, would have required a perpetual easement on approximately a 66-ft long area ranging from 0-ft wide to 4-ft wide, equaling 104 ft² (0.0025-ac) on the front yard of 1851 West 1700 South. To avoid impacting this historic property, the landscape/utility area was reduced from a 10-ft strip to a strip ranging from 6-ft to 10-ft.

Steeper Cut and Fill Slopes

Steeper cut and fill slopes were considered for the historic structures impacted by the proposed action. However, the impacts to these historic structures are not from roadway cut and fill slopes, but from the actual roadway alignment. Therefore, the use of steeper cut and fill slopes was eliminated from consideration as a minimization alternative because their use does not minimize any impact to Section 4(f) properties.

Retaining Walls

Retaining walls were considered for the historic structures impacted by the proposed action. However, the impacts to these historic structures are not from roadway cut and fill slopes, but from the actual roadway alignment. Therefore, the use of retaining walls was eliminated from consideration as a minimization alternative because their use does not minimize any impact to Section 4(f) properties.

Minor Alignment Shifts

Minor alignment shifts for each affected property were discussed in Section 5.4 Avoidance Alternatives. Minor alignment shifts were not considered prudent for either Alternative C or Alternative D for any individual property. Due to the very nature of widening to the north and south of an existing straight alignment, small alignment shifts, to avoid individual properties, result in impacts to properties on the other side of the road.

10-ft Landscape/Utility Area

In order to reconstruct overhead power lines and gravity flow irrigation pipes and structures along the corridor, a 10-ft perpetual easement would be required on individual properties. A perpetual easement on a Section 4(f) property would be considered a "use." To minimize impacts to Section 4(f) properties and avoid "use" where possible, both Alternatives C and D were refined such that a perpetual easement would not be required within the boundaries of otherwise unaffected Section 4(f) properties. Instead, in areas where Section 4(f) properties were being avoided, utilities would be reconstructed within a 10-ft landscape/utility area that would be included in the existing roadway right-of-way, rather than in a perpetual easement. For Alternative C, this would include the north side of Syracuse Road between 1000 West and 1782 West and the south side between Heritage Lane and 2000 West. For Alternative D, this would include the south side of Syracuse Road between 1000 West.

Mitigation and Memorandum of Agreement (Appendix C of Final EIS)

A Memorandum of Agreement (MOA) to resolve adverse effects to historic properties was executed by UDOT, FHWA, Syracuse City, Syracuse Museum Foundation, and the Utah State Historic Preservation Office (SHPO) in April of 2006. The major stipulations of the MOA include:

- An Intensive Level Survey (ILS) will be prepared for the 10 properties adversely affected by the project: 1379 West 1700 South, 1533 West 1700 South, 1557 West 1700 South, 1609 West 1700 South, 1661 West 1700 South, 1711 West 1700 South, 1729 West 1700 South, 1797 West 1700 South, 1848 West 1700 South, and 1862 West 1700 South.
- Additionally, an ILS will be prepared for five additional locally-important properties that will not be adversely affected by the project: 1048 West 1700 South, 1206 West 1700 South, 1518 West 1700 South, 1782 West 1700 South, and 1655 South 2000 West.
- UDOT will provide the Certified Local Government with an opportunity to salvage materials prior to demolition of historic properties.
- Measures regarding discovery of cultural resources during construction as detailed in the MOA.
- All other measures as detailed in the MOA.

Section 4(f) Determination

Based on the above considerations, there is no feasible and prudent alternative to the use of the land from the historic properties impacted by the Selected Alternative. The Selected Alternative includes all possible planning to minimize harm to the properties resulting from the use.

4.0 MEASURES TO MINIMIZE HARM FROM THE SELECTED ALTERNATIVE

During the NEPA process, alternatives were evaluated and adjusted to minimize harm. Alignments and designs were selected to reduce impacts, where possible, while still meeting the project purpose and need. Although impacts to the Section 4(f) resources were a major concern, minimizing harm to all other environmental resource areas was also considered throughout the process. All practical measures to minimize environmental harm by the Selected Alternative have been considered and incorporated into the project. Table ES-1 summarizes the Selected Alternative impacts and the mitigation measures that will minimize harm and/or reduce the effects of the project.

Table ES-1. Environmental Impacts and Mitigation Commitments.

Resource	Selected Alternative Impacts	Mitigation
Land Use (Page 4-1 in the Final EIS)	 Consistent with the planned land uses in project area. Widened roadway will convert 3.0-ac residential, 1.3-ac commercial, and 2.8-ac agricultural property to roadway use. Parks and recreational facilities within the project study area will not be affected. Facilitate commercial development. May speed up development time frame. 	 Needed right-of-way will be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
Farmlands (Page 4-3 in the Final EIS)	 Will convert 2.84 acres of agriculturally zoned land to roadway use. Farming operations will remain viable. May speed up conversion of agricultural land to residential and commercial. 	 UDOT will maintain access to existing farmlands. Needed right-of-way will be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Any potential effects of the Syracuse Road widening to water delivery or irrigation systems associated with agricultural areas will be mitigated. These facilities will be relocated and reconstructed to maintain the continuity and use of the existing systems.
Social Conditions (Page 4-4 in the Final EIS)	 Localized social attachments will be disrupted due to relocation of some residents. Widening the road could reduce social interaction between north and southside residents. Likelihood of roadway being a boundary for schools, churches, and other community organizations will increase, further reducing social interaction between north and southside residents. Raised medians will limit left turns for some residences and businesses near 1000 West and 2000 West and will have a minor effect on traffic patterns. 	 Mature landscaping will be left intact whenever possible. Landscape features to remain will be identified in the final plans. Resident concerns about the potential for reduced auto and pedestrian safety due to increased traffic volumes and traffic speed will be addressed through placement of continuous sidewalk between 1000 West and 2000 West, use of left-turn signals at major intersections, and the use of pedestrian crosswalk lights at signalized intersections. Concerns about the possibility of increased crime and delinquency will be partially alleviated through the addition of street lighting along the corridor. Certain types of lighting, including decorative lighting, may require cost participation by Syracuse City.

Resource	Selected Alternative Impacts	Mitigation
Environmental Justice (Page 4-7 in the Final EIS)	 Will not produce disproportionately high and adverse human health and environmental effects on minority or low-income populations. 	■ No mitigation is required.
Relocations (Page 4-8 in the Final EIS)	 25 Potential Relocations (23 residences, 1 residence/business, and 1 business). Commercial development is expected to continue and will indirectly require additional relocations. 	 Right-of-way acquisition will occur in accordance with federal, state, and local relocation policies. The acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources will be available to each relocated resident without discrimination. UDOT will evaluate the need to provide early right-of-way acquisition for those property owners who demonstrate a hardship due to this project.
Economic Conditions (Page 4-14 in the Final EIS)	 Businesses along corridor will experience economic effects associated with temporary construction inconvenience. Businesses should gain positive long-term effects due to increased roadway capacity, decreased traffic congestion, improved accessibility, and increased exposure to potential consumers. The following businesses will require relocation: J. Kelly Hansen Financial Planning/Quilt School (1797 West 1700 South) and Automatic Transmission Service (1597 West 1700 South). Improved mobility will facilitate development of vacant parcels within and surrounding the project area. New businesses will add to revenue in local economy through sales and property taxes and will provide employment opportunities. Raised medians will limit left turns for some businesses near the 1000 West and 2000 West intersections and will have a minor affect on traffic patterns. 	 Access will be maintained to all businesses during construction. Where minor impacts to businesses (such as driveway reconstruction and parking lot reconfiguration) may occur, the property and business owners will be consulted during the design phase to develop solutions that will best suit the property while fulfilling the purpose and need of the project.
Pedestrians and Bicyclists (Page 4-15 in the Final EIS)	 Pedestrian mobility and safety will be improved through construction of continuous sidewalks on north and south sides of roadway. Bicycle mobility and safety will be improved through construction of Class II bicycle routes (striped and signed bicycle lane within shoulder) along roadway. 	 A Class II bicycle route will be incorporated into the typical section for Syracuse Road; it provides a striped and signed lane on each side of a roadway for one-way bicycle travel. Continuous sidewalks will be provided on both sides of the road. Crosswalks for Syracuse Road will be placed at all signalized intersections. A school crossing will be maintained across Syracuse Road at Allison Way. The school crossing will be relocated to Marilyn Drive if a traffic signal is installed at this location. The school crossing will be coordinated with the Davis County School District.

Resource	Selected Alternative Impacts	Mitigation
Air Quality (Page 4-16 in the Final EIS)	The Syracuse Road improvements have been included in the Wasatch Front Regional Council 2030 Long Range Plan, which conforms to the State Implementation Plan. Not some stad to severe provisible time.	 Mitigation during construction will include the use of dust-control measures per UDOT Standard Specifications. A permit for air quality impacts during construction will be obtained from UDAQ by the contractor to control fugitive dust and emissions.
	 Not expected to cause new violations of the CO or PM₁₀ standard. 	 Ongoing signal time maintenance will be performed by UDOT.
Noise (Page 4-19 in the Final EIS)	Noise Impacts (after relocations):	 A 6-ft noise wall (Noise Wall 5), as shown on Figure 4-6, would be effective in mitigating noise at apartments located at 1010 West 1700 South. Balloting took place during March and April of 2006. The property owner returned the ballot and responded not in support of a noise wall. Thus, the noise wall will not be built. Construction noise impacts will be minimized by adherence to UDOT Standard Specification 1355 - Environmental Protection – Section 1.8 Noise and Vibration Control. Syracuse Road will be signed for the restriction of compression brakes.
Water Quality (Page 4-41 in the Final EIS)	 Impervious area will increase from about 4 to 12 acres, increasing the 10-year peak flow for the project area from roughly 20 cfs to 60 cfs. Groundwater recharge will not be affected since most groundwater recharge occurs along the bases of the mountain ranges (more than eight miles away). Drainage facilities and conditions will be improved through the addition of continuous curb and gutter, catch basins, and storm drain pipelines. Contaminants from the roadway storm water will be collected and conveyed to existing state-approved storm drain systems. 	 A new storm drain system will be constructed that will comply with current UDEQ and UDWQ standards. A SWPPP will be developed and incorporated into the final design plans of the project and an NOI form will be submitted to the UDWQ prior to construction of the project. Short-term impacts to water quality will be minimized through implementation of UDOT's Best Management Practices found in the Temporary Erosion and Sediment Control Manual (July 1999).
Wetlands (Page 4-42 in the Final EIS)	No Impact	■ No mitigation is required.
Floodplains (Page 4-43 in the Final EIS)	No Impact	No mitigation is required.
Wildlife (Page 4-43 in the Final EIS)	No Impact	No mitigation is required.

Resource	Selected Alternative Impacts	Mitigation
Threatened and Endangered Species (Page 4-43 in the Final EIS)	No Impact	 No mitigation is required.
Cultural Resources (Page 4-43 in the Final EIS)	 Some historic structures will be directly affected (impacts will be mitigated): No Adverse Effect: 4 Adverse Effect: 10 Some historic structures along the corridor will be indirectly affected due to ongoing demolition without documentation or consideration of mitigation. 	 A MOA to resolve adverse effects to historic properties was executed by UDOT, FHWA, Syracuse City, Syracuse Museum Foundation, and the Utah State Historic Preservation Office (SHPO) in April of 2006 (see FEIS Appendix C) The major stipulations of the MOA include: An Intensive Level Survey (ILS) will be prepared for the 10 properties adversely affected by the project: 1379 West 1700 South, 1533 West 1700 South, 1557 West 1700 South, 1609 West 1700 South, 1661 West 1700 South, 1711 West 1700 South, 1729 West 1700 South, 1797 West 1700 South, 1848 West 1700 South, and 1862 West 1700 South. Additionally, an ILS will be prepared for five additional locally-important properties that will not be adversely affected by the project: 1048 West 1700 South, 1206 West 1700 South, 1518 West 1700 South, 1782 West 1700 South, and 1655 South 2000 West. UDOT will provide the Certified Local Government with an opportunity to salvage materials prior to demolition of historic properties. Measures regarding discovery of cultural resources during construction as detailed in the MOA. All other measures as detailed in the MOA.
Hazardous Waste Sites (Page 4-51 in the Final EIS)	 Identified LUST sites should not be affected, as they are likely to be outside of the proposed roadway right- of-way limits. 	 Construction plans and contract will describe the LUST sites with the potential of encountering contaminated material and the procedures for dealing with this material, including UDOT Standard Specification 01355. Any suspect material will be tested before it is used as backfill, or it will be removed to an approved disposal facility under local, state, and federal requirements and regulations of the UDEQ and the United States Environmental Protection Agency. If hazardous waste material is encountered during construction, mitigation will be coordinated in accordance with UDOT Standard Specification 01355, which directs the Contractor to stop work and notify the Project Engineer of any discovery of hazardous material. Disposition of hazardous material then would take place under guidelines set by Davis County, UDEQ, and the United State Environmental Protection Agency.

Resource	Selected Alternative Impacts	Mitigation
Visual Conditions (Page 4-52 in the Final EIS)	 Visual changes will occur from implementation of current and future zoning and land use plans. Agricultural land will continue to change to residential and commercial uses. Pavement width will be increased. Paved shoulders, curb and gutter, sidewalk, parkstrip, and lighting will be implemented and will be continuous along the corridor, enhancing the visual characteristics of the roadway. South-side structures and mature vegetation within the proposed roadway right-of-way will be removed. North-side overhead utilities will remain, south-side overhead utilities will be relocated further to the south. Consistent with and will facilitate implementation of Syracuse's Town Center Master Plan and associated visual improvements. Will provide area beyond the curb line to allow for streetscape, landscape, and architectural treatments to develop the desired visual effect. 	 Structures and mature vegetation will remain on north side of the corridor. Landscaping in parkstrips. Area will be provided beyond the curb line to allow for streetscape, landscape, and architectural treatments to develop the desired visual effect.
Energy (Page 4-53 in the Final EIS)	 Energy will be required for construction. Traffic flow will be improved, increasing vehicle speeds and fuel efficiency. Energy requirements will decrease over the long-term as compared to the No-action Alternative. 	■ No mitigation is planned.
Invasive Species (Page 4-54 in the Final EIS)	Potential to introduce invasive species exists due to construction activities. This will be reduced by mitigation measures.	 The contractor will abide by UDOT's Special Provision 02926S - Invasive Weed Control to minimize the spread and introduction of invasive species. Some of the measures in the Special Provision include: Cleaning all earth-moving equipment before entering project Treating existing noxious weeds ten days before starting earthwork operations Controlling invasive weeds using preemergent, selective, and non-selective herbicides as appropriate

Construction

(Page 4-54 in the

Final EIS)

- Area residents and other people using Syracuse Road will experience minor temporary inconveniences due to noise, dust, and travel delays.
- Most businesses in the project area will experience temporary construction inconveniences due to dust, noise, and traffic associated with roadway construction.
- Construction will result in temporary effects on air quality in the project area due to increased dust and particulates.
- Construction noise impacts are considered temporary and will be minimized though adherence to UDOT Standard Specification 01355
 Environmental Protection Section 1.8 Noise and vibration control.
 Extended disruption of normal activities is not anticipated, since no one receptor is expected to be exposed to construction noise of long duration.
- Relocation or reconstruction of some features of the gravity-flow irrigation system and existing storm drain system will be required, including ditches, pipes, turnouts, and catch basins. During construction there is a potential for temporary soil erosion and sediment/siltation impacts to nearby irrigation ditches and canals. Construction-related erosion and sedimentation impacts will be mitigated with the use of Best Management Practices.
- Petroleum contaminants may be encountered on some properties, as discussed in Section 4.17.
- Temporary visual impacts will occur from construction signs, barricades, exposed earth, and construction equipment.
- The potential exists for invasive species to be introduced or propagated in the project area due to construction activities that disturb the existing ground cover.

- Impacts during construction to residences will be mitigated through implementation of a traffic control plan with advance notice to those affected. Also, noise and vibration control and dust control measures will be used. Access to residences will be maintained.
- Access will be maintained to all businesses during construction.
- A permit for air quality impacts during construction will be obtained from the UDAQ by the contractor. Fugitive dust during construction will be mitigated and controlled in accordance with a dust-control plan to be developed with UDAQ. This plan will include measures to minimize fugitive dust, such as application of dust suppressants and water sprays, minimizing the extent of disrupted surface areas, and restricting activities during high wind periods.
- The contractor will be required to abide by the UDOT Standard Specification 01355 – Environmental Protection – Section 1.8 Noise and Vibration Control.
- To minimize the construction impacts to surface waters, a SWPPP will be developed and incorporated into the final design plans of the project, and a NOI form will be submitted to the UDWQ prior to construction of the project. This plan will include the use of BMPs, which will help minimize temporary impacts to water resources.
- If petroleum contamination is encountered during construction, mitigation will be coordinated in accordance with UDOT Standard Specification 01355 Environmental Protection Section 1.3 Hazardous Material Discovered during Construction which directs the contractor to stop work and notify the project engineer of the discovery. Disposition of the hazardous material will then take place under guidelines set by the Davis County, UDEQ, and the United States Environmental Protection Agency.
- Visual impacts due to construction are considered temporary and no mitigation is required.
- The contractor will abide by UDOT's Special Provision 02926S - Invasive Weed Control to minimize the spread and introduction of invasive species.

Context Sensitive Solutions (Page 4-61 in the Final EIS) Addition of a 10-ft wide landscape/utility area to maximize the space between the roadway and residences/businesses remaining on the corridor (in locations where the easement will

Resource	Selected Alternative Impacts	Mitigation
		not cause additional qualitative impacts, such as creating a Section 4(f) use where one woul not exist without the easement or causing a not adverse effect to be made an adverse effect be the addition of the easement). Addition of 6-ft wide sidewalks along the corridor. Piping open irrigation ditches. Lighting along the corridor (decorative lighting may require cost participation by Syracuse City).

6.0 CONSTRUCTION MONITORING

Mitigation measures will be incorporated in the contract plans and specifications and will be monitored by UDOT. This will include monitoring the effectiveness of the Best Management Practices outlined in UDOT's Standard Specifications. Enforcement of the contract provisions and monitoring of the project is the responsibility of the UDOT Local Assistance Program Manager, the UDOT Construction Engineer, and the UDOT Region 1 Environmental Manager. A pre-construction meeting will be held with the contractor to review mitigation requirements and environmentally sensitive areas in the project corridor.

7.0 COMMENTS ON THE FINAL EIS

The Notice of Availability of the Final EIS was published in the *Federal Register* on September 15, 2006 with the period of availability ending on October 16, 2006, a 31-day period of availability. Additionally, the FEIS was available on the project website and upon request from FHWA or UDOT. No comments were received on the Final EIS.

FHWA Utah Division staff contacted the Department of Interior (DOI) and the U.S. Environmental Protection Agency (U.S. EPA) by phone on February 2, 2007 and February 8, 2007, respectively, and verified that the agencies had received copies of the Final EIS and had no comments.

8.0 LIMITATION ON CLAIMS NOTICE (23 USC 13[1])

FHWA will publish a notice in the Federal Register, pursuant to 23 USC 139(1), indicating that one or more federal agencies has taken final action on permits, licenses, or approvals for this transportation project. After the notice is published, claims seeking judicial review of those federal agency actions will be barred unless such claims are filed within 180 days after the date of publication of the notice, or within such shorter time period as is specified in the federal laws pursuant to which judicial review of the federal agency action is allowed.

9.0 CONCLUSION

FHWA has determined that the Selected Alternative best meets the transportation needs for the traveling public while effectively considering environmental, safety, and socioeconomic factors. This decision is based on the Final EIS and the entire project record.

In reaching this decision, FHWA has considered all of the issues raised in the record including the information contained in (and comments to) the Draft and Final EISs. The Selected Alternative was developed through a public process that included project adjustments to avoid and minimize environmental impacts. FHWA consulted with other federal and state agencies including: U.S. Fish and Wildlife Service, EPA, Native American Tribes, Utah State Historic Preservation Office, and Advisory Council on Historic Preservation. A full list of interagency coordination is included in the Final EIS.

Based on the analysis and evaluation in the Final EIS and a balanced consideration of the need for safe and efficient transportation; the social, economic, and environmental impacts of the Selected Alternative; and national, state, and local environmental goals, and input from the public involvement process, the FHWA has determined that it is in the best overall public interest to improve Syracuse Road to five lanes with the Selected Alternative (Alternative C).

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2/22/07

By:

Division Administrator

Federal Highway Administration